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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,402	12/22/2005	Christine Margarete Unger	MXI-352US	6754

959 7590 03/18/2009
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EXAMINER

GUCKER, STEPHEN

ART UNIT

PAPER NUMBER

1649

MAIL DATE

DELIVERY MODE

03/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,402

Applicant(s)

UNGER ET AL.

Examiner

STEPHEN GUCKER

Art Unit

1649

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☒ Claim(s) 1-21 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/88)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Notice To Comply

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

- 1-2. Claim 2, drawn to an amino acid sequence or bioconjugate thereof, Invention 1 corresponds to SEQ ID NO:1, or Invention 2 corresponds to SEQ ID NO:2, classified in class 530, subclass 350+, for example.
- 3-36. Claims 3-4, drawn to an amino acid sequence or bioconjugate thereof, Invention 3 corresponds to SEQ ID NO:5, Invention 4 corresponds to SEQ ID NO:6, Invention 5 corresponds to SEQ ID NO:7, ...Invention 36 corresponds to SEQ ID NO:38, classified in class 530, subclass 350+, for example.
- 37-72. Claim 5, drawn to a polypeptide, antibody, scFV, antibody fragment or bioconjugate thereof comprising one CDR3, Invention 37 corresponds to SEQ ID NO:73, Invention 38 corresponds to SEQ ID NO:74, Invention 39 corresponds to SEQ ID NO:75, ...Invention 72 corresponds to SEQ ID NO:108, classified in class 530, subclass 300+, for example.
- 73-144. Claims 11-12, drawn to an isolated encoding nucleic acid molecule and vector, Invention 73 corresponds to a molecule and vector encoding SEQ ID NO:1, Invention 74 corresponds to a molecule and vector encoding SEQ ID NO:2, Invention 75 corresponds to a molecule and vector encoding SEQ ID NO:5,

Invention 76 corresponds to a molecule and vector encoding SEQ ID NO:6, Invention 77 corresponds to a molecule and vector encoding SEQ ID NO:7,...Invention 107 corresponds to a molecule and vector encoding SEQ ID NO:38, Invention 108 corresponds to a molecule and vector encoding SEQ ID NO:73, Invention 109 corresponds to a molecule and vector encoding SEQ ID NO:74, Invention 110 corresponds to a molecule and vector encoding SEQ ID NO:75,... Invention 144 corresponds to a molecule and vector encoding SEQ ID NO:108, classified in class 435, subclass 320.1+, for example.

145. Claim 16, drawn to an *ex vivo* method of determining the dependency of the invasiveness of cancer cells on the functionality of neuropilin-1 involving migration of cancer cells, classified in class 435, subclass 4+, for example.
146. Claims 17-18, drawn to an *ex vivo* method of determining the dependency of the adhesion of cancer cells on the functionality of neuropilin-1 to a layer of ECM proteins, classified in class 435, subclass 4+, for example.
147. Claims 19-20, drawn to a method of identifying a ligand binding specifically to the extracellular region of neuropilin-1 by using a phage display library, classified in class 435, subclass 7.1+, for example.
- 148-292. Claim 21, drawn to a method of treatment, with Inventions 148-149 corresponding to the use of sequences of Inventions 1-2, Inventions 150-183 corresponding to the use of sequences of Inventions 3-36, Inventions 184-219 corresponding to the use of sequences of Inventions 37-72, Inventions 220-291 corresponding to the use of sequences of Inventions 73-144, and Invention 292

corresponding to the use of a ligand of Invention 147, classification based on the chemical nature of the treatment product used.

293. Claims 7-8 and 13-15, drawn to "uses" lacking any recitation of process steps, classification dependent on said process steps. Should the claims be amended to recite process steps, these claims may be classified as belonging to one or more of the aforementioned Inventions 145-292 or to one or more additional inventive groups, i.e. Invention 294, etc.

2. Claims 1, 6, 9, and 10 link(s) Inventions 1-72. The restriction requirement among the linked inventions is **subject to** the nonallowance of the linking claim(s), claims 1, 6, 9, and 10. Upon the indication of allowability of the linking claim(s), the restriction requirement as to the linked inventions **shall** be withdrawn and any claim(s) depending from or otherwise requiring all the limitations of the allowable linking claim(s) will be rejoined and fully examined for patentability in accordance with 37 CFR 1.104. **Claims that require all the limitations of an allowable linking claim** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

Applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, the allowable linking claim, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the

provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

3. The inventions listed as Inventions 1-293 do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: a special technical feature by definition must be novel or be considered to involve an inventive step over the prior art. However, the international search report for this application, filed 6/17/05, indicates that all claims of the instant application are either not novel or cannot be considered to involve an inventive step when the reference is considered alone (see WO 99/55855 or the five other "X" references listed in the international search report). Therefore, Inventions 1-293 do not relate to a single general inventive concept because Inventions 1-293 lack a special technical feature which by definition must be novel or be considered to involve an inventive step over the prior art.

4. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- (a) the inventions have acquired a separate status in the art in view of their different classification;
- (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

- (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- (d) the prior art applicable to one invention would not likely be applicable to another invention;
- (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either

instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the

right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims.

Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

7. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth below or on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures: The paper copy of the sequence listing is missing from the application. In addition, all sequences in the specification and drawings must have a corresponding SEQ ID NO associated with each individual sequence. This is not the case with the instant application, for example, see Figures 7b, 8b, and 9 of the drawings that require multiple SEQ ID NOs, and also see page 52 of the instant specification, lines 8-9.

Applicant is required to comply with the sequence rules, 37 CFR 1.821 - 1.825 in response to this Office Action. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Applicant is requested to return a copy of the attached Notice to Comply with the reply.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gucker whose telephone number is 571-272-0883. The examiner can normally be reached on Mondays through Fridays from 0930 to 1800.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Stucker, can be reached at 571-272-0911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/S. G./

Examiner, Art Unit 1649

Stephen Gucker

March 18, 2009

/Jeffrey Stucker/

Supervisory Patent Examiner, Art Unit 1649